

## CLAIMS

I claim:

1. Bung forming process in which a piece (1) is provided, featuring a protrusion (2) designed to define said bung, said protrusion (2) constituting a conduit (3) with a previously closed end (4), with said piece (1) in place in enclosure (5); the release of said piece (1) from said enclosure (5) is permitted using relative driving means (6) of one (1) in relation to the other (5) and in which said previously closed end (4) is unplugged using cutting means (7) operated, directly or not, by said driving means (6).

2. Process according to claim 1, in which said driving means (6) are operated in rotation around the longitudinal axis (10) of said protrusion (2); the rotation of said driving means (6) is transformed into a separation movement (11) along said axis (10) of said piece (1) and said enclosure (5) and the rotation of said driving means (6) is transformed into a penetration movement (12) along said axis (10) of the cutting means (7) into said previously closed end (4), with said penetration movement (12) being faster than said separation movement (11).

3. Process according to claim 2 in which, prior to releasing piece (1), a thread is made at the surface of said conduit using an imprint (13) defining part of said enclosure (5) and the rotation of said driving means (6) is transformed into a separation movement of said piece (1) and of said enclosure (5) by unscrewing said protrusion (2).

4. Device to form a bung, comprising an enclosure (5) capable of accommodating a piece (1) featuring a protrusion (2) designed to define said bung, relative driving means (6) of said piece (1) in relation to said enclosure (5), capable of permitting the release of said piece (1) from said enclosure (5) and cutting means (7) to unplug a previously closed end (4) of a conduit (3) consisting of said protrusion (2), operated by said driving means (6).

5. Device according to claim 4, comprising means (14) to operate said driving means (6) in rotation around a so-called pivot axis (10), designed to correspond to the longitudinal axis of said protrusion (2) whenever the piece (1) is in place inside said enclosure (5), first means (15) to transform the rotation of said driving means (6) into a separation movement (11), about said pivot axis (10), of said piece (1) and said enclosure (5), and second means (16) to transform the rotation of said driving means (6) into a penetration movement (12), about said pivot axis (10), of the cutting means (7) into said previously closed end (4), with said second means (16) capable of causing a penetration movement (12) faster than the separation movement (11) caused by said first means (15).

6. Device according to claim 5, comprising means to make a thread at the surface of said conduit (3) consisting of an imprint (13) defining part of said enclosure (5) and in which said first means (15) to transform the rotation of said driving means (6) consist of the thread made at the surface of said piece (1) to be operated in rotation by said driving means (6).

7. Device according to claim 6 in which said driving means (6) consist of a component (17) bearing said imprint (13) and of a rotating central core (18), capable of operating said component (17) bearing the imprint around said pivot axis (10).

8. Device according to claim 7 in which said cutting means (7) consist of one or more blades (19), with said blade(s) (19) resting at one end (20) on a nut (21), driven under the action of the central core (18) in either direction about said pivot axis (10) inside a reservation (22) provided between said central core (18) and a fixed sleeve (23), coaxial to said central core (18), with said blade(s) (19) emerging via a hole (24) through said component (17) bearing the imprint with their end (25) opposite to that (20) resting on said nut (21).

9. Device according to claim 8, in which said nut (21) and said imprint (13) have a differential pitch allowing for a movement of the blade (19) end that is faster than the unscrewing of the protrusion (2) in the component (17) bearing the imprint (13).

10. Device according to claim 8, in which said blades (19) comprise means (32) to hold said previously closed end (4) after being cut.

11. Device according to claim 10, in which said means (32) to hold said previously closed end (4) consist of a slot (33) provided crosswise in the thickness of said blades (19) at the level of their face (34) designed to be opposite to said previously closed end (4) when cutting.

12. Device according to claim 8, comprising means to initiate a cut in the thickness of said previously closed end (4).

13. Device according to claim 12, in which said means to initiate a cut consist of:

- means to position in a protruding manner said blades (19) in relation to hole (24) from which they emerge, before cutting.

- a rib (37) extending in a circular manner around said pivot axis (10) the protruding part of said blades (19) at the surface of said component (17) bearing the imprint.

14. Device according to claim 13, in which said positioning means consist of means permitting to adjust the position of the ends (20) of the blades resting on said nut (21) in relation to the bottom (39) of a groove (40) provided therein.

15. Fabrication mold for a hollow body, such as a tank, provided with a bung, equipped with the device according to any of claims 8 through 14.

16. Mold according to claim 15, consisting of a first and second imprints defining between them a mold cavity of said hollow bodies, with said first and second imprints being capable of separating from each other along a direction roughly parallel to the longitudinal axis of said conduit (3), said mold being equipped with a central core (18) fixed in relation to said first or second imprint in which said device is to be located.

1.7. Mold according to claim 15, consisting of a first and second imprints defining between them a mold cavity of said hollow bodies, with said first and second imprints being capable of separating from each other along a direction concurrent to the longitudinal axis of said conduit (3), said mold being equipped with a central core (18) mobile along said longitudinal axis of the conduit (3) in relation to said first or second imprint in which said device is to be located.